

REMARKS

This responds to the Office Action mailed on January 21, 2005. Reconsideration of the application is respectfully requested. In this response, claims 1, 3, 4, 10, 13, 16, 19, 22, 23, 25 and 30 are amended, claim 9 is canceled, and no claims are added; as a result, claims 1–8 and 10–33 are now pending in this application.

Information Disclosure Statement

Applicants submitted an Information Disclosure Statement and a 1449 Form on November 1, 2001. Applicants respectfully requests that an initialed copy of the 1449 Form be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

§102 Rejection of the Claims

Claims 1, 2, 16-19, 21 and 30-31 were rejected under 35 USC § 102(e) as being anticipated by Souissi et al. (U.S. 6,556,817). Applicants' claim 1, as amended is directed to initiating a communication session in which a cost estimate of the communication session is determined based on a quality of service level and a quantity of information to be communicated. As recited in claim 1, the quality of service level comprises data rate information, error rate information and packet priority information and is based on an information content class. In accordance with claim 1, one or more communication networks are interrogated to determine quality of service levels and cost of service information. The communication session is initiated after the cost estimate is determined.

Souissi, on the other hand, is directed to communicating based on the varying time incremental costs of communication. In Souissi, a time incremental cost is established based solely on the *quantity* of data to be conveyed (see Souissi column 8 lines 40 – 63). Applicants

find no teaching, suggestion or motivation in Souissi to determine cost of a communication session based on the *quality* of the communication (e.g., data rate information, error rate information and packet priority information) or based on a quality of service level as recited in Applicants' claim 1. Souissi only refers to quantity information to be transmitted by the communication unit (or similarly based on call duration) which is provided in a request from the communication unit to the base station (see Souissi column 14, line 37 through column 15 line 8). Souissi further mentions that a requesting communication unit may negotiate a tariff in real-time based on the amount of system resources (e.g., time and/or bandwidth) to be utilized by requesting communication unit (see Souissi column 8 lines 59 – 63). Souissi uses time and/or bandwidth to quantize the quantity of information, which may be transmitted quicker using a greater bandwidth or slower using a lower bandwidth. Souissi is not concerned with a quality of service level and makes no mention of this.

Souissi is further not concerned with quality of service levels for an information content class, as recited in Applicants' amended claim 1. Souissi is only concerned with only one type of content - telephony communications (e.g., over the cellular or wireless telephone network) and does not state anywhere that such networks provide the flexibility of varying a quality of service level (e.g., data rate information, error rate information and packet priority information), combining Souissi with other references cannot result in Applicants' claimed invention.

Applicants' claims 1, 16, 19, 22 and 30 further distinguish over Souissi by reciting that one or more communication networks are interrogated to determine available quality of service levels and cost of service information. Applicant finds no such teaching in Souissi.

In view of the above, Applicants submit that Souissi does not anticipate Applicants' amended claim 1.

Claims 1, 3, 19 and 30 were also rejected under 35 USC § 102(e) as being anticipated by Yeh (U.S. 6,690,929). Yeh states that in a cellular environment, a mobile negotiates quality of service (QOS) at call initiation, during the call and at handoff between cells. Applicants submit that Yeh's use of the term quality of service (QOS) is not the same as Applicants' use of the term

quality of service. Yeh's QOS refers to bandwidth and SNR in TDMA and CDMA systems and states that in TDMA systems, only bandwidth can be varied by varying the number of time slots, while in CDMA systems, the SNR can be varied by changing the processing gain and signal power (see Yeh column 8, lines 18 – 32). Yeh further states that at present only two QOS parameters can potentially be altered; bandwidth for TDMA and the negotiated time period (see Yeh, column 8 lines 28 – 30). Yeh mentions other "modulation schemes" (see column 8 line 32, Yeh) that may be able to handle multiple QOS parameters, which refers to networks that can handle both bandwidth and SNR variation because Yeh states that only bandwidth can be varied in TDMA and only SNR can be varied in CDMA. Yeh's use of QOS therefore cannot imply data rate information, error rate information and packet priority information, as recited in Applicants' amended claim 1. In view of this Applicants submit that Yeh does not anticipate Applicants' amended claim 1.

Furthermore, Yeh's pricing is related to quantity/bandwidth and demand (i.e., not data rate information, error rate information and packet priority information). This is clear from FIG. 3 of Yeh which shows price vs. quantity/bandwidth curves for different demand levels, which are illustrated by the different curves.

Furthermore, Yeh is further not concerned with quality of service levels for an information content class, as recited in Applicants' amended claim 1. Yeh is only concerned with telephony communications (e.g., over the cellular or wireless telephone network) and because such networks do not provide the flexibility of varying a quality of service level (e.g., data rate information, error rate information and packet priority information) combining Yeh with other references cannot result in Applicants' claimed invention.

Applicants' claims 1, 16, 19, 22 and 30 further distinguish over Yeh by reciting that one or more communication networks are interrogated to determine available quality of service levels and cost of service information. Applicant finds no such teaching in Yeh. In further view of the above, Applicants submit that Yeh does not anticipate Applicants' amended claim 1.

Claims 22 and 24 were also rejected under 35 USC § 102(e) as being anticipated by Walter et al. (U.S. 2002/0022471). Claims 22 and 24 recites a wireless communication device having a memory to store a quality of service level, and a processor to determine a cost estimate of a communication session based on the quality of service level and a quantity of information to be communicated. The quality of service level comprises data rate information, error rate information and packet priority information and is based on an information content class. The wireless communication device also includes a transceiver to interrogate one or more communication networks to determine available quality of service levels and cost of service information, and to initiate the communication session with a selected one of the networks when the cost estimate is accepted.

Walter is directed to data rating a communication session in which a number of kilobytes or a number of packets are metered for a period of time/duration (see Walter paragraph [0010]). Walter states that the data rating uses an algorithm that includes the class of service and the quality of service (see Walter paragraph [0018]). Walter also applies an applicable rate to the metered data (see Walter paragraph [0020]). The data rating and metering taught by Walter is performed *after* a communication session is initiated (see Walter paragraph [0024]). Walter does not provide a cost estimate of a communication session *prior to initiation*. Accordingly, Walter does not anticipate Applicants' claim 22.

Furthermore, Walter use of the term quality of service does not include data rate information, error rate information and packet priority information as recited in Applicants' claim 1 (see Walter paragraph [0018]). Furthermore, Walter does not teach, suggest or motivate interrogating one or more communication networks to determine *available* quality of service levels and cost of service information. Walter only rates the communication session based on the data *actually being transmitted* (see Walter paragraph [0018] line 7).

Claims 22, 24, 28 and 29 were also rejected under 35 USC § 102(e) as being anticipated by Preston et al. (U.S. 2002/0155823). Preston is directed to providing cost of service (COS) information from a mobile unit to a virtual central office. Preston's cost of service is based on a

rates that vary based on content (see Preston [0033]). There is no teaching, suggestion or motivation in Preston that cost of service is related to a quality of service level that includes data rate information, error rate information and packet priority information as recited in Applicants' claim 1. Preston's cost of service is related to the type of content. Preston furthermore does not allow a user to initiate a communication session based on a cost estimate. Preston provides the cost of service information as the session is ongoing, not up front. Applicants further find no teaching, suggestion or motivation in Preston to interrogate one or more communication networks. Preston is concerned with cost of service with one network (see Preston FIG. 1). Accordingly, Preston does not anticipate Applicants' claims 22, 24, 28 and 29.

§103 Rejection of the Claims

Claims 3 and 32 were rejected under 35 USC § 103(a) as being unpatentable over Souissi et al. in view of Robertson (U.S. 6,463,274) or Gnesda et al. (U.S. 6,721,554). Applicants' claims 3 and 32 recite receiving data from a communication network corresponding to the quality of service level desired by a user of a wireless communication device, and determining network capabilities by the wireless communication device from the communication network. Applicants' claim 3, for example, allows a user's device to receive data from a communication network to allow the user to make a decision based on the cost of a quality of service level. Gnesda teaches that a QOS level of a call is measured by the network and the user is billed in accordance with the actual quality of service that was provided (see Gnesda Abstract and column 2 lines 21 – 25). Applicants find no teaching, suggestion or motivation in Gnesda of "receiving" data indicating available quality of service levels from a communication network at the user's device to allow a user to make a decision based on the cost of a desired quality of service level. Basically, in Gnesda, a user cannot select a QOS level, but must pay for whatever QOS level the user receives. In view of the above, Applicants submit that combining Gnesda with any of the other cited references does not result in Applicants' claimed invention.

Robertson teaches that a handset is directed to change its operating parameters based on system traffic levels (see Robertson column 1, line 62 through column 2 line 3). Robertson's hand set employs a variable bit rate vocoder that can operation at one of three bit rates. In Robertson, a user can select a one-time increase in the bit rate (e.g., when receiving an important call) and will be billed accordingly.

Applicants' find no teaching, suggestion or motivation in Robertson of "receiving" data indicating *available* quality of service levels from a communication network at the user's device to allow a user to make a decision based on the cost of a desired quality of service level. Basically, in Robertson, a user can only request a one-time data rate increase during a call and cannot make a decision of price versus QOS level. Robertson's quality of service refers only to bit rate and does not include data rate information, error rate information and packet priority information, as recited in Applicants' amended claims. In view of the above, Applicants submit that combining Robertson with any of the other cited references does not result in Applicants' claimed invention.

Claims 4 and 9-12 were also rejected under 35 USC § 103(a) as being unpatentable over Souissi et al. in view of Robertson or Gnesda et al. and further in view of Stinson (U.S. 6,493,556). Claim 4 recites that a plurality of communication networks are interrogated to determine available quality of service levels and cost of service information. Claim 4 further recites that the user selects one of the communication networks based on the available quality of service levels and cost of service information. The Examiner states that the combination of Souissi, Robertson or Gnesda fail to teach the claimed subject matter.

Stinson is directed to a master routing hub that selects a communication path in accordance with a quality of service indicator received from a subscriber unit. The master routing hub provides a path having the best available quality of service at the lowest cost to subscribers (see Stinson abstract, column 5 lines 36 – 42, and operation 440 FIG. 4). In Stinson, these operations are performed by the routing hub, not the user device. The user device only provides a quality of service indicator and does not make any selection itself. In Stinson, a

subscriber unit cannot select among networks – it can only provide a QOS indicator and the master routing hub selects a route. Furthermore, Applicants find no teaching, suggestion or motivation in Stinson of a user device actually *interrogating* a plurality of communication networks to determine available quality of service levels. In view of this, Applicants submit that claim 4 is allowable over the cited art.

Claims 5 and 9-15 were also rejected under 35 USC § 103(a) as being unpatentable over Souissi et al. in view of Robertson or Gnesda et al. and further in view of Preston et al. As discussed above regarding Souissi, Robertson and Gnesda, Applicants' submit that any combination of these references does not result in Applicants' claims 5 and 9 – 15.

Claims 13 – 15 as amended, recite that a wireless communication device is assigned a PDP address for communicating with the packet radio network during a plurality of communication sessions and that the wireless communication device uses a first PDP address during a first of the communication sessions at the first quality of service level, and that the wireless communication device uses a second PDP address during a second of the communication sessions at a second quality of service level. Applicants find no teaching, suggestion or motivation in any of the cited art, either separately or in combination of communicating a different quality of service levels during different sessions using different PDP addresses as recited in claim 13. Furthermore, Applicants find no teaching, suggestion or motivation in any of the cited art, either separately or in combination of providing cost estimates to the use for the communication sessions based on the quality of service level and quantity of information as recited in Applicants' claim 15, as dependent on claims 13 and 1.

Claim 25 was also rejected under 35 USC § 103(a) as being unpatentable over Preston et al. in view of Mueller et al. (U.S. 6,185,413). Muller discloses querying different carriers for charge data, however Muller does not teach, suggest or motivate interrogating one or more networks to determine available quality of service levels and associated costs. Muller is not

concerned with quality of service levels and is only concerned with routing telephone calls in a cost efficient matter.

Claims 6-8 were also rejected under 35 USC § 103(a) as being unpatentable over Souissi et al. in view of Robertson or Gnesda et al. and further in view of Preston et al. and further in view of Walter et al. Claims 20, 26, 27 and 33 were also rejected under 35 USC § 103(a) as being unpatentable over Souissi et al. in view of Walter et al. Claim 23 was also rejected under 35 USC § 103(a) as being unpatentable over Preston et al. in view of Souissi et al.

Based on the remarks above with respect to Souissi, Robertson, Gnesda, Preston, or Walter, Applicants submit that any combination of these references does not result in Applicants' claimed invention. As discussed above, neither of these references teach, suggest or motivate, at least the following elements of Applicants' independent claims:

1) Interrogating one or more communication networks to determine available quality of service levels and cost of service information, wherein the quality of service level comprises data rate information, error rate information and packet priority information;

2) determining a cost estimate based on a quality of service level and a quantity of information; and

3) initiating a communication session *based on* the cost estimate.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney, Greg Gorrie at (480) 659-3314, or Applicants' below-named representative to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21 day of April 2005.

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